Comparison of characteristics of respondents and non-respondents in a population-based epidemiologic survey in Houston/Harris Country

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Abstract

Background

It is very important to understand the dynamics of a sampled population in terms of respondents and non-respondents. A better understanding of the sampled population may assist in improving future recruitment strategies. To address this issue in the context of a population-based epidemiologic survey of Human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) patients in Houston/Harris County, we conducted data analysis to determine the characteristics of the two groups, using the minimum data set obtained from existing HIV/AIDS surveillance system (HARS).

Methods

The study sample was obtained from medical monitoring project – a population-based epidemiologic survey designed to produce a representative data on people living with HIV/AIDS who are receiving care in Houston/Harris County. The respondents and non-respondents during 2007-2008 cycles totaled 335. Of these population, 211 (63%) were linked to existing data in HARS to obtain the basic characteristics of the patients referred to as minimum data set. HARS captures information on HIV/AIDS patients at the time of diagnosis. Characteristics of the two groups were evaluated using both descriptive and inferential statistics (t-test and chi-square).

Results

The results indicate that of the total of 211 records matched in HARS, 75% of the patients were interviewed and 25% of them refused interview. Of the 124 unmatched records in HARS, 19% were respondents and 81% refused to participate. Based on the matched records, 54% of the patients were infected with HIV compared to 46% infected with AIDS. The independent distribution of gender, race/ethnicity, age category at HIV and AIDS diagnosis, insurance type, CD4 counts and anti-retroviral therapy across the two groups were not statistically significant ($P>0.05$). However, a significant association ($P<0.05$) was only reported between patients receiving PCP prophylaxis who were interviewed and those that refused interview. Non-respondents were 39% (OR=1.39; 95%CI=1.01-1.92) more likely than respondents to have received PCP prophylaxis.

Conclusions

Although our findings indicate that there was generally no significant difference between the two groups' characteristics, the non-respondent were at an advanced stage of the illness compared to the respondents.